I-Chao Shen

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Room 501, CSIE Building, National Taiwan University

Research Interests

- Data-driven 2D/3D geometry analysis and processing, (Stereo) Image/Video Editing.

Education

- **National Taiwan University**   **Taipei, Taiwan**
  Ph.D. student in Computer Science   *Sep 2017 -*
  Advisor: Bing-Yu Chen.

- **National Taiwan University**   **Taipei, Taiwan**
  Master in Information Management and MBA   *Sep 2009 - June 2011*
  Advisor: Bing-Yu Chen.
  Thesis: "Perspective-aware Warping for Seamless Stereoscopic Image Cloning".

- **National Taiwan University**   **Taipei, Taiwan**
  Bachelor in Information Management   *Sep 2005 - June 2009*

Experiences

- **Research visitor - JST CREST Project**, Tokyo, Japan   *Feb 2018 - July 2018*
  Supervisor : Takeo Igarashi

- **Research Assistant - Imager Lab, The University of British Columbia**,
  Vancouver, Canada   *Sep 2014 - Mar 2017*
  Supervisor : Alla Sheffer

- **Research Intern - Imagination Lab, Adobe Research**, San Jose, CA   *May 2015 - Aug 2015*
  Supervisor : Nathan Carr, Duygu Ceylan, Zhaowen Wang

- **Research Assistant - CITI, Academia Sinica**, Taipei, Taiwan   *Sep 2011 - July 2014*
  Supervisor : Wen-Huang Cheng

Publications

- **Perception-Driven Semi-Structured Boundary Vectorization**
  Shayan Hoshyari, Edoardo Dominici, Alla Sheffer, Nathan Carr, Duygu Ceylan, Zhaowen Wang, I-Chao Shen
  ACM Transactions on Graphics (Proceedings of SIGGRAPH 2018), to appear.

- **High-resolution 360 Video Foveated Stitching for Real-time VR**
  Wei-Tse Lee*, Hsin-I Chen*, Ming-Shiuan Chen, I-Chao Shen and Bing-Yu Chen
  Computer Graphics Forum (Proceedings of Pacific Graphics 2017)

- **A Scalable Active Framework for Region Annotation in 3D Shape Collections**
  Li Yi, Vladimir G. Kim, Duygu Ceylan, I-Chao Shen, Mengyan Yan, Hao Su, Cewu Lu, Qixing Huang, Alla Sheffer, and Leonidas Guibas
  ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2016)

- **Retargeting 3D Objects and Scenes with a General Framework**
  Chun-Kai Huang, Yi-Ling Chen, I-Chao Shen, and Bing-Yu Chen
  Computer Graphics Forum (Proceedings of Pacific Graphics 2016)

- **Data-driven Handwriting Synthesis in a Conjoined Manner**
  Hsin-Yi Chen, Tse-Ju Lin, I-Chao Shen, and Bing-Yu Chen
  Computer Graphics Forum (Proceedings of Pacific Graphics 2015)

- **Gestalt Rule Feature Points**
  I-Chao Shen, and Wen-Huang Cheng
  IEEE Transactions on Multimedia (TMM), 17(4), pp. 526-537, 2015

- **Geometrically Consistent Stereoscopic Image Editing using Patch-based Synthesis**
  Sheng-Jie Luo, Ying-Tse Sun, I-Chao Shen, Bing-Yu Chen, and Yung-Yu Chuang
  IEEE Transactions on Visualization and Computer Graphics (TVCG), 21(1), pp. 56-67, 2015
- **Stroke-guided Image Synthesis for Skeletal Structure Editing**
  Sheng-Jie Luo, Chin-Yu Lin, I-Chao Shen, and Bing-Yu Chen
  Computer Graphics Forum (Proceedings of Pacific Graphics 2013)
- **Perspective-Aware Warping for Seamless Stereoscopic Image Cloning**
  Sheng-Jie Luo, I-Chao Shen, Bing-Yu Chen, Wen-Huang Cheng, and Yung-Yu Chuang
  ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2012).

Short Papers, Posters

- **Large-scale fabrication with interior zometool structure**
  Ming-Shiuan Chen, I-Chao Shen, Chun-Kai Huang, and Bing-Yu Chen
  ACM SIGGRAPH Poster Program 2018
- **A Deep Learning Based Method For 3D Human Pose Estimation From 2D Fisheye Images**
  Ching-Chun Chen, Chia-Min Wu, I-Chao Shen, and Bing-Yu Chen.
  ACM IUI Poster Program 2018
- **Retargeting 3D objects and scenes**
  Chun-Kai Huang, Yi-Ling Chen, I-Chao Shen, and Bing-Yu Chen
  ACM SIGGRAPH Poster Program 2015
- **Painting Photolization**
  Chien-Wen Jung, I-Chao Shen, Sheng-Jie Luo, Bing-Yu Chen, and Wen-Huang Cheng
  ACM SIGGRAPH ASIA Poster Program 2013
- **Texturing and Deforming Meshes with Casual Images**
  I-Chao Shen, Yi-Hua Wang, Yu-Mei Chen, Bing-Yu Chen, and Wen-Huang Cheng
  ACM SIGGRAPH ASIA Poster Program 2012
- **User-Assisted Disparity Maps**
  Hsin-Yi Chen, Yi-Shan Lin, I-Chao Shen, Sheng-Jie Luo, Wen-Huang Cheng and Bing-Yu Chen
  Pacific Graphics 2012 short paper
- **MusicSpace: You "Play" The Music**
  Chun-Yu Tsai, Hung-Jung Lin, Tzu-Hao Kuo, Kai-Yin Cheng, I-Chao Shen, Bing-Yu Chen, and Rung-Huei Liang
  ACM SIGGRAPH Poster Program 2010

Patent

- **Smoothing images using machine learning**
  Nathan A Carr, Zhaowen Wang, Duygu Ceylan, I-Chao Shen
  United States Patent, No. 9799102, issued October 24, 2017.

Teaching Experiences

- **Teaching Assistant**
  - **Computer Organization and Structure** *National Taiwan University* *Sep 2009 - Jan 2010*

Awards and Honors

- MediaTek Fellowship *2017*

Professional Services

- **Reviewer:** SIGGRAPH, Pacific Graphics, CAD/Graphics, Multimedia, VRST